generating means generates the transmission halt signal with an instruction of signal transmission allowed when reception quality monitoring results of plural base stations in the sub-signal are smaller than a predetermined value, and said transmission control means sets the signal transmitting sate of its own base station to a signal transmitting condition when the transmission halt signal indicates the instruction of signal transmission allowed.--

## **REMARKS**

The specification has been amended to correct minor errors. Support for the amendments to the specifications may be found in Figure 6.

Claims 1, 4, 5, 6, 7, 11, 12 and 16 have been amended to more clearly define Applicant's invention and, in the case of claim 5, to address the objection thereto. Claims 2, 3, 8, 9, 10, 13, 14, 15, 17, 18, 19, 20, 21, 22, 23 and 24 have been canceled. Claims 25-34 have been added to more adequately protect Applicant's invention, with claims 25-29 and 31 corresponding to the subject matter previously set forth in canceled claims 10, 15, 17, 18, 19 and 22, respectively.

Reconsideration of the application in view of the foregoing amendments and the following remarks is respectfully requested.

Claims 18 and 23 stand rejected under 35 U.S.C. §112, first paragraph. Claim 23 has been canceled and, claim 18 has been replaced with claim 28, which comports with the disclosure of the specification on page 16, lines 20-24.

Claims 1-3, 7-9 and 13-14 stand rejected under 35 U.S.C. §102(a) as being anticipated by Douzono, et al. (U.S. Patent No. 5,574,983). Applicant respectfully traverses this rejection.

Douzono, et al. discloses the power control technology to be used for the CDMA system, especially during the soft handover state, and the technology has the following technical features:

(1) A base station measures the received SIR of signal transmitted from a mobile station power control data according to the number of mobile stations which are under the soft

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handover state using this base station. The mobile station power condition data is used for instructing a mobile station to control its transmission power and the instructed value which is the target level. Therefore, target level of the transmission power of mobile station varies depending on the number of mobile stations under the soft handover state.

- (2) A mobile station measures the received SIR of signal transmitted from a base station. The mobile station generates a base station power control data according to the number of base stations for the soft handover. The base station power control data is used for instructing a base station to control its transmission power and the instructed value which is the target level. Therefore, target level of the transmission power of base station varies depending on the number of base stations under the soft handover state.
- (3) A mobile station measures the communication quality of the base station transmission signal. When the communication quality degraded below threshold quality, the mobile station requests the radio channel switching for switching the base station under communication. The threshold quality varies depending on the number of base stations under the soft handover state.

As described above, Douzono, et al. only discloses the power control technology (transmission power alteration) to be used for the CDMA system, especially during the soft handover state, but does not disclose or suggest the transmission signal on/off control which is the technical feature of the present invention.

More specifically, Douzono, et al. does not specify "a base-station specifying means for comparing reception quality of downward signals from respective base stations monitored at... downward reception quality monitoring means, and for generating a base-station specify signal which specifies a base-station having the best reception quality monitoring result to maintain a signal transmission."

Further, Douzono, et al. neither discloses nor suggests "transmission control means, for receiving the base station specifying signal demodulated by the demodulating means, for keeping a downward signal transmission when its own base station is specified in the base-station specify signal, and for stopping a downward signal transmission when its own base-station is not specified in the base-station specify signal."

In view of the foregoing, it is respectfully submitted that independent claim 1 is clearly not anticipated or rendered obvious by Douzono, et al. Claims 7-9 are dependent either directly or indirectly from claim 1 and are, therefore, patentable over Douzono, et al. for the same reasons, as well as because of the combination of the features set forth in these claims with the features set forth in the claim(s) from which they depend.

Claims 4, 10 and 15 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Douzono, et al. in view of Wang, et al. (U.S. Patent No. 5,721,733). Although claims 4, 10 and 15 have been canceled, Applicant provides the following comments with respect to the difference of Applicant's invention as compared to Wang, et al.

The present invention prevents signal transmission from a base station from being stopped when a transmission error is detected in the base station specify signal. This is because that each base station knows only own base station state and does not know the state of other base stations. Therefore, if each base station stops power transmission in accordance with wrong information, it may cause all base stations stop power transmission and it causes communication between the base station and the mobile station being disconnected. For avoiding this situation, the present invention ignores information of the base station specify signal with error.

No such arrangement is either disclosed or suggested by Wang, et al.

The first paragraph of section 9 of the Office Action states that claims 5 and 11 are rejected under 35 U.S.C. §103(a) as being unpatentable by Douzono, et al. in view of Wang, et al. However, it is apparent from the following paragraph that the Examiner actually meant to reject claims 5-11 over the combination of Douzono, et al. and Bruckert, et al. (U.S. Patent No. 5,548,808). Applicant respectfully traverses this rejection.

Claim 5 is dependent from claim 1 and is, therefore, patentable over Douzono, et al. for the same reasons advanced above in connection with claim 1.

In addition, Bruckert discloses the technology that a base station is entered into the handover state at the handover threshold but does not transmit communication signal until certain transmit threshold is satisfied. The handover threshold and the transmit threshold are determined in accordance with signal level difference transmitted from respective base stations concerned. The present invention, as defined in claim 5, specifies plural base stations for

specifying transmitting signal when the difference of downward reception quality of all base stations are smaller than a threshold level for obtaining the site diversity effect.

Claim 11 is dependent from claim 7, which patentably distinguishes over Douzono, et al. by specifying, *inter alia*, "base-station specifying means for comparing reception quality of downward signals from respective base-stations monitored at....downward reception quality monitoring means, and for generating a base-station specify signal which specifies a base-station having the best reception quality monitoring result to maintain a signal transmission. As discussed above, no such base-station specifying means is disclosed in Douzono, et al.

In addition, claim 11 specifies that the base-station specifying means generates a base-station specify signal which specifies plural base-stations each having a smaller difference of reception quality monitoring result than a predetermined value. No such base-station specifying means is disclosed or suggested in either Douzono, et al. or Bruckert, et al.

Claims 6 and 12 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Douzono, et al. Claim 6 is dependent from claim 1 and claim 12 is dependent from claim 7. Accordingly, it is respectfully submitted that these claims are patentable over Douzono, et al. for the same reasons advanced above in connection with claims 1 and 7, as well as because of the combination of the features set forth in these claims with the features set forth in the claim(s) from which they depend.

Claims 16-24 stand rejected under 35 U.S.C. §103(a) as being unpatentable by Douzono, et al. in view of Kanai (U.S. Patent No. 5,898,682 and Rahman (U.S. Patent No. 5,933,777). Applicant respectfully traverses this rejection.

Claim 16, as amended, specifies "transmission halt signal generating means for receiving the sub-signal demodulated by... demodulation means, comparing reception quality of downward signals from respective base stations monitored at the mobile station indicated in the sub-signal, and for generating a transmission halt signal which indicates a signal transmission instruction whether transmission should be allowed or halted at its own base station in accordance with the reception quality monitoring result indicated in the sub-signal; and transmission control means for receiving the transmission halt signal from said transmission halt signal generating means, and for setting a signal transmission state of a downward signal from its

own base station, whether a signal transmitting or a signal stopping, in accordance with the instruction indicated in the transmission halt signal."

As acknowledged by the Examiner, "Douzono, et al. fails to disclose said base-stations generate a transmission signal indicating whether or not transmission of downward signals from its own station are to be halted in accordance with the demodulated sub-signal." Neither Kanai nor Rahman disclose such a transmission halt generating means, nor, obviously, transmission control means which is responsive to such a signal. Accordingly, it is respectfully submitted that claim 16 is patentable over the combination of Douzono, et al., Kanai and Rahman.

New claims 25 and 26 are dependent either directly or indirectly from claim 7 and are, therefore, patentable for the same reasons, as well as because of the combination of the features set forth in these claims with the features set forth in the claim(s) from which they depend.

Claims 27-30 are dependent from claim 16, and are, therefore, patentable for the same reasons, as well as because of the combination of the features set forth in these claims with the features set forth in claim 16.

New claim 31, like claim 16, specifies transmission halt generating means which compares reception quality of downward signals from respective base stations monitored at said downward reception quality monitoring means, and for generating a transmission halt signal which indicates whether transmission should be allowed or halted at its own base station in accordance with a reception quality monitoring result. Further, claim 31 specifies transmission control means which is responsive to such a signal.

Accordingly, it is respectfully submitted that claim 31 is patentable over the references for the same reasons as claim 16.

New claims 32-34 are dependent from claim 31, and are, therefore, patentable for the same reasons, as well as because of the combination of the features set forth in these claims with the features set forth in claim 31. In view of the foregoing, this application is now believed to be in condition for allowance, which action is respectfully requested.

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on April 6, 2000:

Martin Pfeffer

Name of applicant, assignee or Registered Representative

Signature

April 6, 2000

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